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DISCOVERIES AT ANTHEDON IN 1889.

[PLATES XIV, XV.]

II. REPORT ON EXCAVATIONS AT ANTHEDON.*

In the winter of 1888-9, the Director of the American School at Athens decided to conduct excavations at one or two ancient sites in Boiotia, and invited me to take charge of the work. As early in the spring as the weather permitted, work was begun among the ruins of Anthedon.

Anthedon is first mentioned by Homer (*Iliad*, II. 508), who speaks of it as the furthest town in Boiotia. The pseudo-Dikaiarchos (*Bíos Ἑλλάδος*, 17) tells us that it was situated on the shore of the Euripos, 70 stadia from Chalkis and 160 from Thebes. Pausanias (IX. 22.6) adds that it lay on the left side of the Euripos (as he came from the eastward) at the foot of Mt. Messapion. This is all the information that the ancient writers give us about the location of the town, but it is enough to identify, as the ancient site, the remains on the shore of the Euripos, about a mile and a half to the north of the little village of Loukisi, and this identification has never been questioned. The remains consist of a city-wall "of the most regular kind of masonry,"¹ an acropolis hill with remains of fortification-walls, the foundations of two breakwaters enclosing a small harbor, and "part of the platform of a great public building, thirty-four yards long, founded in the sea."

About the city itself our information is scanty. The pseudo-Dikaiarchos (*l. c.*) tells us that it was a town of no great size, and that it had an agora surrounded by a double stoa and planted with trees. Strabo

* For the plans which accompany this article, I am indebted to Mr. Robert Weir Schultz, of the British School at Athens. Mr. Schultz visited Anthedon with me after the excavations were completed, and was on the ground less than a day and a half. For this reason his plan, though rendering accurately the appearance of the foundations as a whole, does not attempt to give the exact dimensions and levels of the remains. The walls are rougher at the edges in some places than might be inferred from the plan.

¹ LEAKE, *Travels in Northern Greece*, vol. II, p. 272.

(*Geog.*, 404) and Athenaios (I. 56, VII. 47, 99, XV. 24) give us no additional information of importance. Pausanias (*l. c.*), however, tells us that "somewhere about the middle of the city" there was a shrine of the Kabeiroi, and, close by, a temple of Demeter and Kore, containing their statues in white marble. On the land-side of the city, according to the same authority, lay a temple of Dionysos, containing a statue of the god. There were also at Anthedon the tombs of the sons of Iphimedeia and Aloeus, slain by Apollo, and near the sea the so-called Leap of Glaukos. The last, as Mr. Buck has suggested, "was probably a natural cliff like the numerous Lover's Leaps on our eastern coast." If so, it can only be the steep cliff on the seaward side of the acropolis. Ovid refers twice to Anthedon (*Met.*, VII. 232-3, XIII. 903 ff.) in connection with Glaukos, and Stephanos of Byzantion (*Ἑθνικῶν*, s. v. *Ἀνθηδών*) quotes Lykophron (*Alex.*, 754) for the statement that it was founded by Thracians. Finally, we know from inscriptions (Larfeld, *Syll. Inscr. Boeot.*, 15, 181, 274) that in the last years of the fourth century B. C. and toward the end of the third, Anthedon was a member of the Boiotian League, a fact which was further testified to by one of the inscriptions unearthed by us. As to the name of the town, it seems natural to connect *Ἀνθηδών* with *ἄνθος*. Stephanos of Byzantion (*l. c.*) tells us that the place got its name *διὰ τὸ πασῶν ἀνθηροτάτην εἶναι*, a view which a visitor to Anthedon in late February or early March would certainly be inclined to favor.

Our work at Anthedon began March 5, and continued for three weeks, during which time only one day was lost through bad weather. The number of men employed varied from fourteen to thirty-five, the average being about twenty-five. Mr. Carl D. Buck remained with me during the greater part of the three weeks, and by his suggestions aided me much. Through the kindness of Mr. Ree, director of the English company which is draining Lake Copais, we were allowed, without charge, to use one of the company's buildings half-an-hour's walk from the acropolis of Anthedon. With the aid of the sketch-plan given by Col. Leake (*l. c.*), we were able to trace the course of the city-walls over their whole extent. We found rather more remains of the walls than Leake had indicated, and at one point traces of a tower. Leake's plan seems inaccurate in some respects. The depth of the town from north to south is greater than would be inferred from it, and a comparison of the accompanying sketch of the harbor

with his plan will show that he did not accurately give the relative positions of the breakwater and the "public building" (*Fig. 16*).

We were disappointed to find that nearly the whole area of the city was planted with grain, for, as the only point at which a building could confidently be looked for was at the platform by the sea, we had counted on doing a great deal of experimental digging; but, while we should not have hesitated to dig through grain fields if we had had undoubted indications of important remains, it seemed hardly justifiable to do so on an uncertainty. Work was begun at the platform already mentioned. There were visible, besides the platform, an outer foundation-wall of poros blocks, with a few blocks of an upper course of a rough conglomerate. The wall was well built and the blocks were regular. Four trenches were dug inward from the sea at different parts of the platform. All these, at a depth of 0.56 m.,

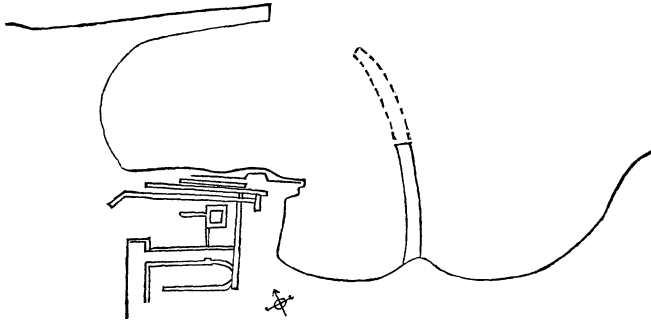


FIG. 16.—*Harbor and Foundations at Anthedon.*

ran into a second foundation-wall composed of large regular blocks of poros. The average size of the blocks is as follows: length, 1.20 m.; breadth, 0.80 m.; thickness, 0.47 m. The wall, which is evidently of Greek workmanship, runs nearly east and west, parallel to the outer wall and to the sea. Eight days were spent in the work at this place, and the foundations of a very extensive structure, or combination of structures, were laid bare (PLATE XIV). During this work there were found: near the junction of the walls *e* and *e'*, the top of an inscribed stele of poros, and, close to the most southern wall *n*, an inscribed basis of blue limestone; near the stele, a small Doric capital of poros, 0.36 m. in diameter, with twenty channels and with a dowel-hole in the top; in the part of the structure furthest from the sea, considerable remains of a Roman mosaic pavement with a rather complicated and pretty

pattern in several colors ; besides various small objects of no special interest or value.

As the space included in these foundations was so great, and the excavations so barren of epigraphic results or of sculpture, it was deemed best to do only so much work as was necessary to show the ground-plan clearly, without attempting wholly to explore the interior.

The work at Anthedon was, as has been said, merely experimental, and confined to a comparatively small area. Our next trial was made on the acropolis, a hill near the sea and the eastern wall of the city. It descends abruptly into the sea in rocky cliffs, and on its brow are considerable remains of fortification-walls of regular masonry. The top of the hill consists mainly of bare or scantily covered rock, but on the side toward the sea there is a level terrace with a considerable depth of soil. Across this terrace a trench was dug from east to west, and two others were made at right angles to the first ; but nothing was found except two walls roughly built of small, irregular stones.

The third trial was made on a hill just outside the city-walls to the southeast, between them and the dry bed of a stream. Excepting the acropolis, this is the most considerable elevation in the immediate neighborhood of the site, and it commands an extensive view, including the acropolis and the greater part of the area of the city. Surreptitious digging for tombs, which has been carried on to a great extent at Anthedon, had previously been done there, and the ground was littered with fragments of pottery. A small portion of a fairly good wall, running about east and west, projected above the surface of the ground on the southern side of the hill. It seemed a promising place at which to look for the temple of Dionysos. Three trenches were dug into the northern side of the hill, and the wall mentioned above was followed. As this proved to form part of a foundation, work was abandoned in two of the three trenches, and the men were transferred to the walls, which in the course of the day were completely laid bare. The foundation seemed to be that of a very small temple, with some irregularities of structure, built of well-cut blocks of the local poros. Though trenches were dug in all directions about the walls, nothing was found except a small Doric unchanneled capital (0.36 m. in diameter) and a long unchanneled drum, both of poros.

Meanwhile, in the trench which had been continued, we found, at a depth of only 0.28 m., a collection of over twenty-five bronze implements and small ornaments, together with a great quantity of sheet

bronze and bronze slag. Four men were kept at work the rest of the day at this point, but found nothing more except some small rough vessels of unpainted clay, and, at a considerable distance, some Byzantine graves. The bronze implements were taken to the National Museum at Athens.

We decided next to make an attempt to find the temple of the Kabeiroi, which Pausanias (*l. c.*) says was in the middle of the city. A very long trench was dug from the southern slope of the acropolis toward the southern city-wall, with two shorter ones at right angles to it. These trenches ran for their whole length through a grain field, the owners of which received compensation. In the upper part of the long ditch, bed-rock was very soon reached; in the lower part, the depth was about a metre. A great many tombs were found, but no walls of any other kind. In the upper part of the trench, on the south-

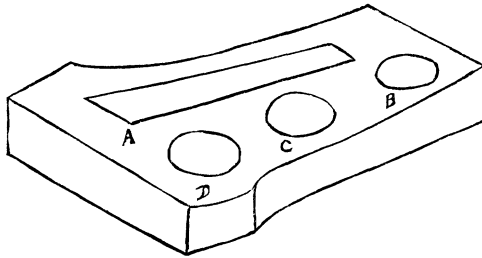


FIG. 17.—Object in poros found at Anthedon, perhaps a σηκωμα.

ward slope of the acropolis, we found an object in poros which is reproduced in *Figure 17*. It is 0.58 m. long, 0.38 m. wide at one end and 0.265 m. at the other. The four cavities, *A*, *B*, *C*, *D*, have the following dimensions :

<i>A</i> , 0.39 m.	by 0.095 m.;	depth, 0.07 m.;	capacity, 1.5	litre.
<i>B</i> , 0.135 m.	in diameter;	" 0.074 m.;	" 0.725	"
<i>C</i> , 0.13 m.	" " "	" 0.065 m.;	" 0.5	"
<i>D</i> , 0.125 m.	" " "	" 0.06 m.;	" 0.425	"

In many ways it resembles the σηκώματα which have been found in different parts of Greece and Italy. It differs, from any of those I know, in its small size, in having the rectangular cavity *A*, and in the small size of the three circular cavities. It bears no inscription. It is finished smooth except on the bottom, which is left rough. It

is now in the church-yard at Loukisi, where were deposited the less important objects found at Anthedon. Further down in the same trench was what appeared to be a very small tomb, made of two pieces of stone hollowed out into a double coffer. It is 1.40 m. long by 0.80 m. wide, and 0.19 m. deep. It somewhat resembles a coffered ceiling-piece, except that it is made of two pieces of stone.

The fourth and last trial was made at a low hill some distance east of the city, beside the road to Chalkis. Here there had been found a sacred boundary-stone of rough conglomerate, not *in situ*, but in a Byzantine grave; and there were visible above ground two architectural fragments, a small Doric frieze-block of poros, with triglyphs, and a small poros cornice-block with denticular ornamentation. There were also, projecting from the surface, some good walls, which, however, proved to be tomb-walls. At this point a great many trenches were dug in all directions, but no trace of a temple-foundation was found. A number of architectural fragments were brought to light, some of which showed traces of blue and red. Of these, a Corinthian capital, rather prettily ornamented but evidently of late workmanship, was taken to the museum at Thebes. In one of the trenches, at a depth of 0.81 m., were found two dedications to Artemis Eileithyia, and what may perhaps be a fragment of a third dedication to Artemis. A great many Byzantine graves were found, one of which was covered by a large inscribed stele of marble, now in the museum at Thebes. At a depth of 2.60 m., was found a grave which was cut in a circular shape in the virgin soil. In this grave were glass beads, bits of bronze, and fragments of terracotta figurines, besides a number of small objects of gilded terracotta with bronze eyelet-holes, which had evidently formed a necklace. They consisted of pear-shaped and crescent-shaped pendants, beads, and small button-like disks, two of which bore well-executed heads.

III. ARCHITECTURAL DISCOVERIES AT ANTHEDON.

THE FOUNDATIONS BY THE SEA.

Between the outer wall and the water's edge lies an extensive platform of poros blocks. This platform, which projects beyond the wall for some distance, is at present 48.50 m. long, and its greatest width is 7.10 m. It appears to have originally run some distance further to

the westward. It is cut by grooves 0.11 m. wide and 0.08 m. deep, which are represented in the plan (PLATE XIV). These grooves may have been used in fastening on an upper course of stones, or, more probably, they may have served merely to let the water run off when the waves dashed over the platform, as must have occurred if the platform was originally of its present height.² The wall *c* shows no trace of further extension toward the east, but apparently ran some distance further toward the west. The length of the existing portion of the wall is 26.25 m. It is built of regular, well-squared blocks of poros. The wall *d* is 0.40 m. higher, and runs parallel to *c*. Its eastern portion is very regular. Toward the west, although it is firmly built and averages over a metre in breadth, the edges are very irregular. There is no trace of a continuation of this wall further to the west. Its total length is 50 m. The wall *e* is parallel to *c* and *d* until it reaches a point just beyond the end of *d*, when it bends sharply. It greatly resembles *d* in every respect; like *d* it is regular and even at the eastern end, but it soon grows irregular at the edges and is more irregular than *d*. Its total length is 47 m. These two walls are crossed at right angles by a third, *é*, which corresponds in all respects to *d* and *e*. Where it intersects *d* and *e* it is regular and even, but it soon becomes ragged at the edges, and is the most irregular of the three walls. This irregularity may perhaps be explained by the nature of the material, which is soft and friable, but, at and near the junction of *d*, *e*, and *é*, the walls, though of the same material, are as regular and even as if built of marble. From *e* is built a slightly sloping, regular foundation of blocks a little over a metre in width. It appears to be the foundation of a sloping entrance into the structure. It is flanked by two blocks of limestone about 0.80 m. square, on which are marks of columns about 0.50 m. in diameter. Directly across the end of this entrance run the remains of a wall *f*, which was probably a supporting wall, not rising much above its present level. The length of this wall, as it now exists, is 11 m.

All the walls so far described are very much alike, and seem to have belonged, with the platform, to a single structure. What this structure was it is difficult to say. It certainly was not a temple. Now the only building not a temple which our literary authorities speak of,

² Mr. Schultz believes that the platform was originally much higher, reaching the level of the foundations.

unless the enigmatic Leap of Glaukos was a building, is the double stoa around the agora mentioned by the pseudo-Dikaiarchos; and the long parallel walls *d* and *e* might very well belong to such a structure. The agora in a town of fishermen and mariners would naturally be situated near the port, around which the town evidently clustered. All that Leake says (*l. c.*) about the supposed temple might apply equally well to the agora. The entrance, if it be an entrance, descends to the port, as would be expected.³

Of the other walls, the next in order, *m*, is probably Greek. From the fact that it does not run parallel to *d* and *e*, and because it is of poorer and rougher construction, it probably belonged to a different structure. The dressed stones of the plan are of blue limestone and stand on the outer (southern) edge of the wall *m*: when uncovered they appeared in shape like the top of a stele, formed of a large central stone and two smaller ones at the sides. Between the central and the eastern stone was a bit of a Doric column of poros, showing channels.

The small structure between this wall and *e* is of extraordinary irregularity. The blocks composing the walls are good, and the foundation is firm and broad, but the edges are very irregular, hardly any two blocks being of the same width. A small and narrow wall of very poor construction connects it with *m*. Through the western wall is carried a v-shaped water-trough, formed of grooved lengths of stone. This comes abruptly to an end after running a short distance.

The walls *n* seem to form the foundation of a Roman building. The curved portion of this wall, which rests upon *é*, contains mortar. At the western end are considerable remains of a Roman mosaic pavement. The greater part of this was covered with a thin layer of plaster, which revealed the individual stones composing the mosaic but hid the pattern. To the west is a rectangular flooring, with remains of a similar mosaic pavement. This flooring seems to have been surrounded by a foundation-wall, of which there are but scanty remains. At the northern end of this rectangle are some exceedingly irregular walls. All these walls are built of blocks of poros, and we found no traces of mortar anywhere except at the curved part of the wall *n*. It is quite possible that these foundations extend still further toward the

³ Mr. Schultz is of the opinion that the end of the walls *d* and *e* has not been reached, though, as has been said, there is no trace of their further extension. It may be mentioned as a curiosity that there is a tradition, among the villagers of Loukisi, of a palace of Alexander in that neighborhood.

south and west, but there is no trace of a continuation of any of the walls represented in the *PLAN*, and the general results were not such as to lead me to excavate at this point more than was necessary to make a complete piece of work.

THE SMALL TEMPLE AT ANTHEDON.

I have ventured to call this building a temple, from its general form and because its position seems to correspond with that of the temple of Dionysos, as Pausanias describes it. It is very small, its extreme length being only 10.47 m., and its breadth, 6.05 m.; but, according to the pseudo-Dikaiarchos, Anthedon was in his time only a small fishing-village. The walls are certainly Greek, and of a good period.⁴ The walls of the pronaos are the best and most regular, those at the back are rougher. The walls within (*B* and the wall at right angles to it) I cannot understand (*PLATE XIV*). There appears to be no reason for considering them earlier or later than the other walls. It will be noticed that the building faces almost exactly east. It lies on a slight slope, the eastern end being somewhat higher than the western. To the west there is a stream, dry while I was at Anthedon, whose banks at this point are strengthened by regular masonry. The building lies very near the road from Anthedon to Thebes, as is indicated by the line of opened graves. Absolutely nothing was found by which the building could be identified. The bronze implements were found less than a hundred feet away.

IV. BRONZE IMPLEMENTS FOUND AT ANTHEDON.

These implements comprise the following objects (*PLATE XV*):

I.—Double-edged axe-head, with a hole for inserting a handle. Length, 0.225 m.; width at edges, 0.08 m.; width at middle, 0.04 m.; greatest thickness, 0.025 m. The edges of the sides are beveled toward the hole in the centre, which is 0.038 by 0.017 m. It shows no signs of use.

II.—Another axe-head of the same general shape, but smaller, and broader in proportion to its length. It shows evident marks of use

⁴ Mr. Schultz agrees with me in this opinion.

⁵ I am indebted to Mr. W. J. Stillman for the excellent photograph from which *PLATE XV* is made. The photograph was taken after I left Athens, and, as all of the objects could not be represented, some of those to which I wished to call special attention happen to be omitted.

in the nicked edges. Length, 0.135 m.; width at edges, 0.066 m.; width at middle, 0.038 m.; greatest thickness, 0.024 m.; hole in the middle, 0.035 by 0.02 m.

III, IV.—Fragments of similar tools. Length of first, 0.076 m.; width at edges, 0.062 m.; width at break, 0.037 m.; greatest thickness, 0.024 m. Length of second, 0.08 m.; width at edges, 0.052 m.; width at break, 0.04 m.; greatest thickness, 0.027 m. The break in each is through the hole in the middle, but the two fragments evidently do not belong to the same axe-head.

Axe-heads very like all these have been found in the excavations on the acropolis at Athens, at a depth of 14 m.

V.—Implement consisting of a tube, apparently for inserting a wooden handle, and a short blade beveled to a sharp edge from the under side. Total length, 0.145 m.; length of tube, 0.055 m.; diameter of tube, 0.056 m. Similar objects were found with the axe-heads in the excavations on the acropolis at Athens, but their use has not been satisfactorily explained. A bit of sheet bronze is fastened to the under side of our specimen, which led to the suggestion that a bronze plate had been soldered on, forming a shovel. This view is hardly tenable, and it seems clear, especially from the sharp beveled edge, that the instrument is complete as it is. It may have been used for grubbing roots, or as a kind of gouge. Our specimen is slightly heavier, and rather more carefully made, than the one from the Athenian acropolis.

VI.—End of the blade of a similar instrument (not represented in the PLATE). Length, 0.05 m.

VII.—Piece of bronze resembling a hollow horn. It appears to have been part of some ornament, rather than of an implement of any kind. A bit of sheet bronze is attached to this near the end.

VIII.—Fragment of a narrow, slightly curved band, with raised edges, ornamented with the figure of a stag in repoussé. There are traces of the hind legs of a similar animal going in the opposite direction. The stag's head is thrown back almost upon its haunches, while the horns project in front.

IX.—Drill resembling those now used in working stone. Length 0.13 m.; width at large end, 0.025 m.; at small end, 0.011 m.

X.—Smaller tool somewhat like an awl, with four flat sides, and with a tang for inserting into a wooden handle. Total length, 0.095 m.;

without handle, 0.057 m. ; width, 0.07 m. It is barely possible that these two implements may have been used in cutting stone.⁶

XI.—Chisel, with a flaring edge, consisting, in one piece, of two parts, the chisel proper, and the part to be inserted in a wooden handle. These are separated by a projection on each side. Total length, 0.21 m. ; length of chisel proper, 0.12 m. ; of handle, 0.075 m. ; width of edge, 0.042 m. It shows no signs of use.

XII.—Sickle, ornamented with lines, the edge beveled on one side. Length of arc, 0.31 m. ; greatest width of blade, 0.035 m. It is broken across the middle. It has a tang to be inserted in a wooden handle, pierced with a hole for receiving a rivet. It appears to have been used, for the edge is nicked and the point blunted.

XIII–XXVI.—Blades and fragments of blades, mostly of knives of various shapes and sizes, the longest of which measures 0.19 m. Nearly all of these show signs of long use, some being nearly worn through by constant whetting and wear ; one is bent nearly double ; many of them still bear the rivets by which they were fastened to the handles. One blade (not represented in the PLATE) appears to be serrated, but it may be that it is only nicked, although the nicks are remarkably regular.

XXVII.—Fragment resembling a bundle of reeds or rods. Length, 0.068 m. ; circumference, 0.073 m. ; width of each reed, 0.010 m.

XXVIII.—Handle of a large vase or caldron with a fragment of the side (not represented in the PLATE).

XXIX–XXXI.—Three smaller handles.

XXXII.—Fragment, apparently of a lance-head, consisting of a thick central shaft, with a thinner blade. Length, 0.05 m. ; greatest width, 0.04 m. This is not represented in the PLATE.

XXXIII.—Oval piece of bronze, with indistinguishable ornament in relief.

XXXIV.—Ring of bronze wire (perhaps a bracelet), 0.056 m. in diameter.

XXXV.—Two fragments of a flat-sided bronze rod.

Besides these were found a great quantity of sheet bronze, and large masses of bronze slag, some fragments apparently of the vessel to which the large handle belonged (XXVIII), and a number of small objects.

As has been said, these implements were not deposited in a tomb.

⁶ Mr. Stillman says, decidedly, that they could not have been used for that purpose.

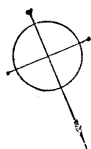
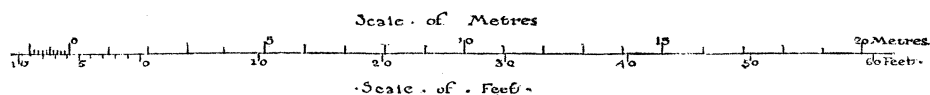
The character of the collection—including implements of various kinds, some new and some bearing marks of long use, fragments of ornaments, together with the presence of masses of bronze slag (thirty or forty pounds, at least)—suggests that we may have come upon the shop or stand of a maker of bronze tools, and that the old implements and fragments were collected to be worked over, while the apparently unused ones may or may not be products of his skill. This theory would account for what seems to be the case, that we have, in the collection, objects of different epochs. It seems more than doubtful that the axe-heads and the object described under No. V can belong to the same time as the ornament with the stag in relief.

JOHN C. ROLFE.

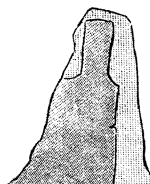
*American School of Classical Studies
at Athens.*

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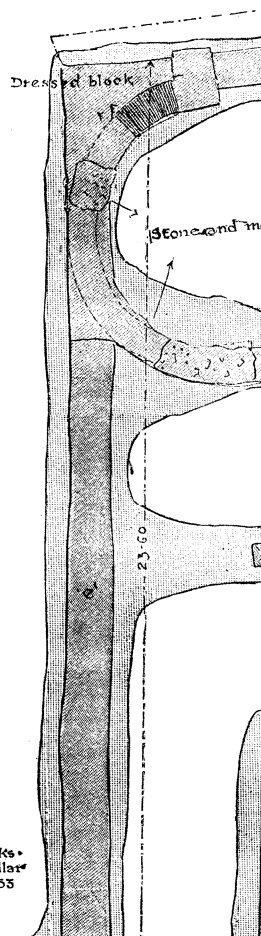
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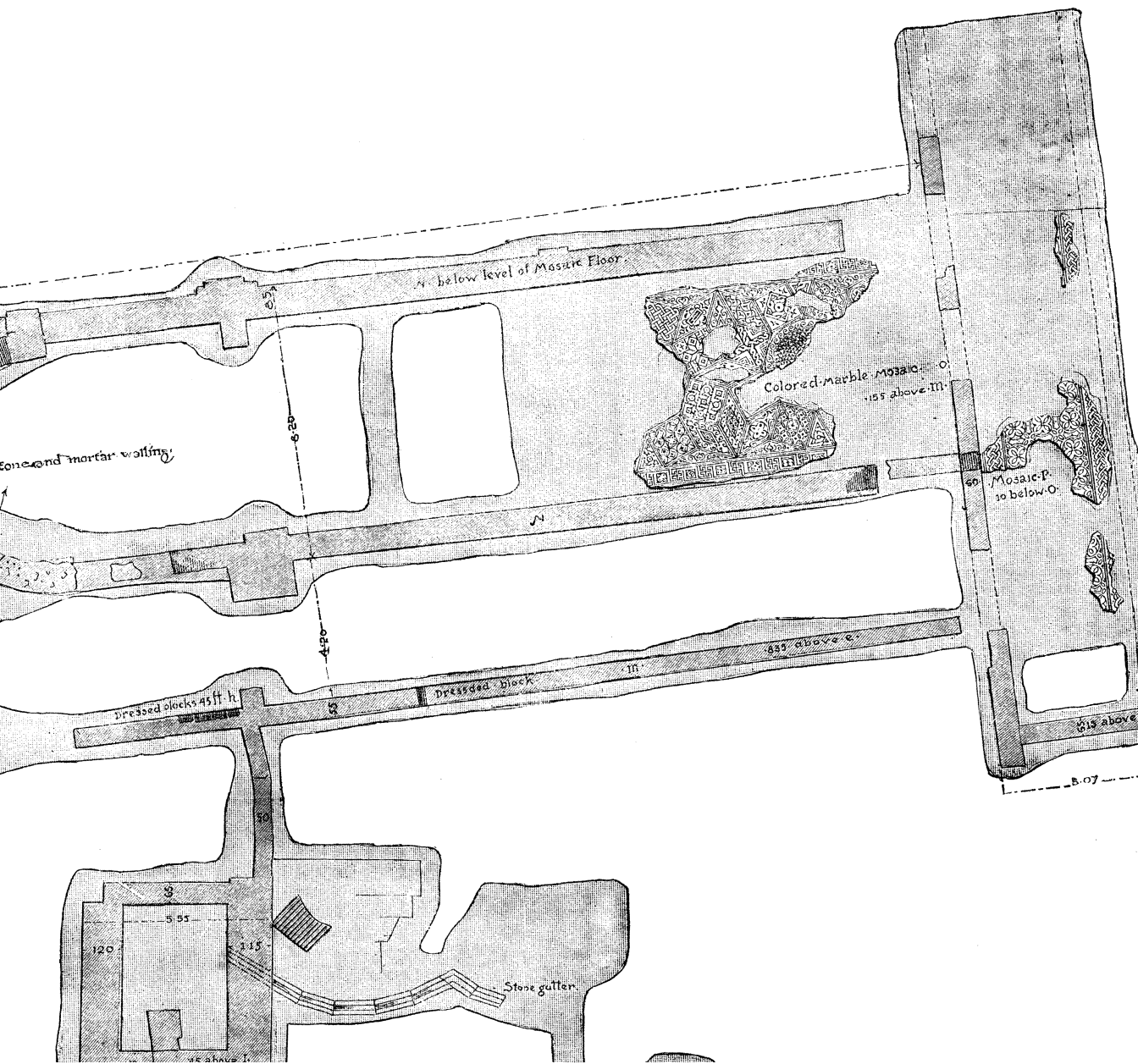


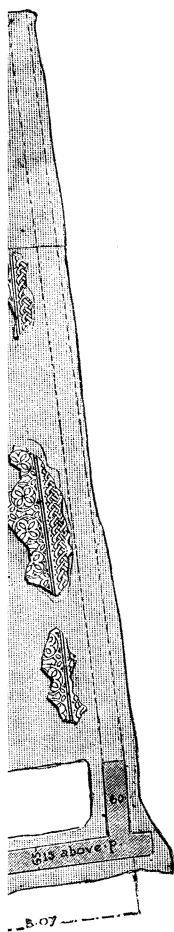
The lines of foundation walls are very irregular. Figures show average widths. The levels are only approximate.



Dressed foundation blocks 34 thick with line of pillar on top. Upper surface 53 above level of H.

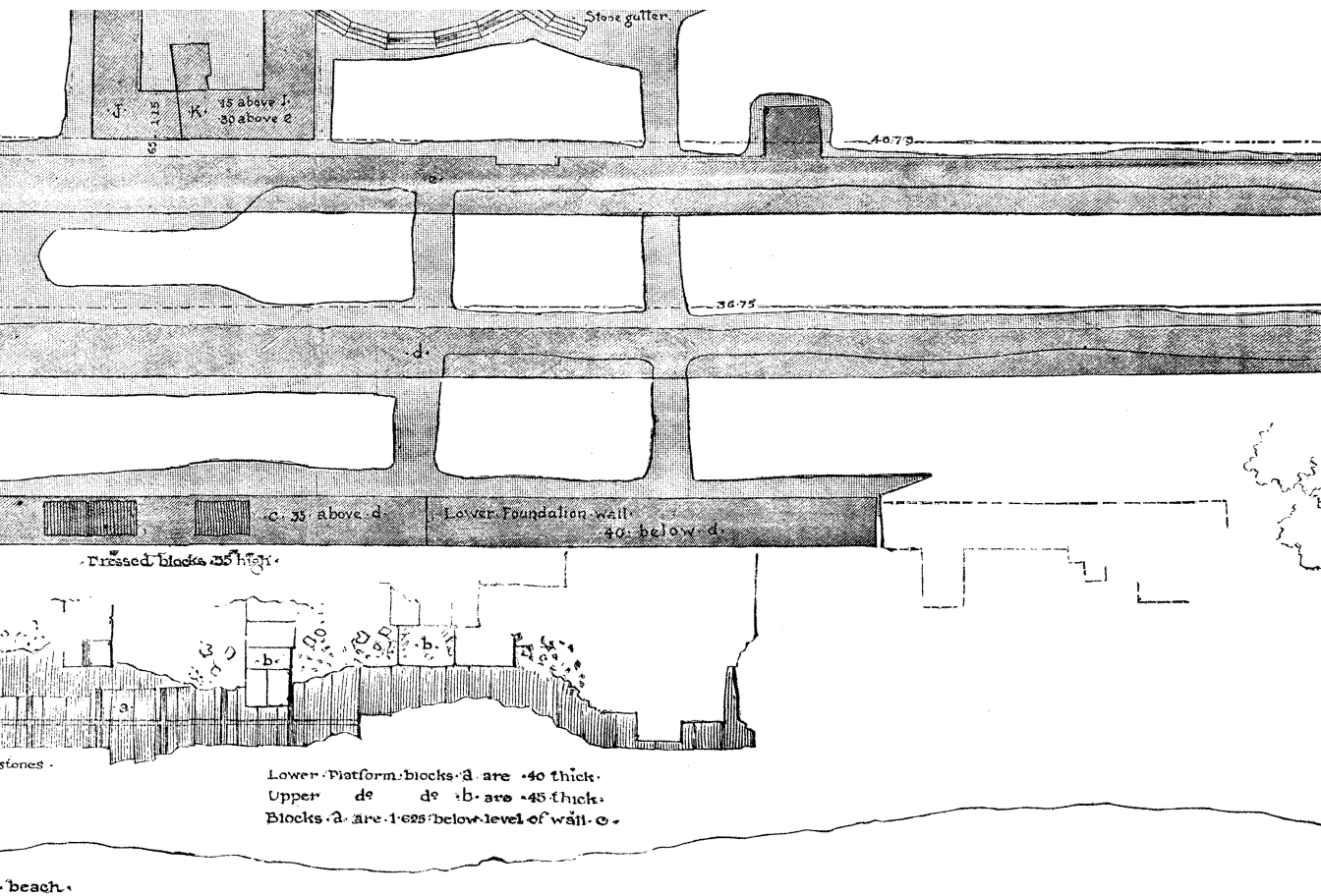


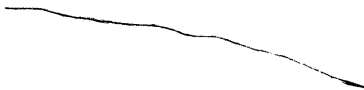
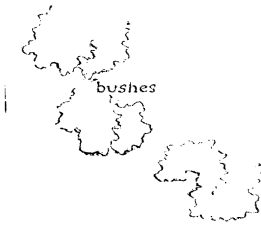
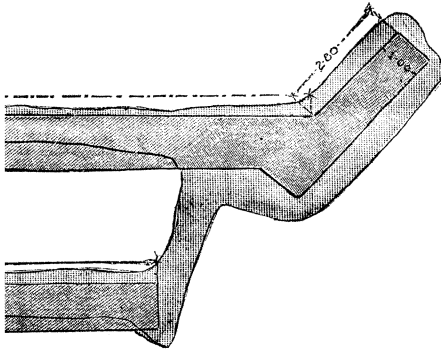




Light tint shows area of excavated surface.
 Grey tint shows foundation walls in situ.

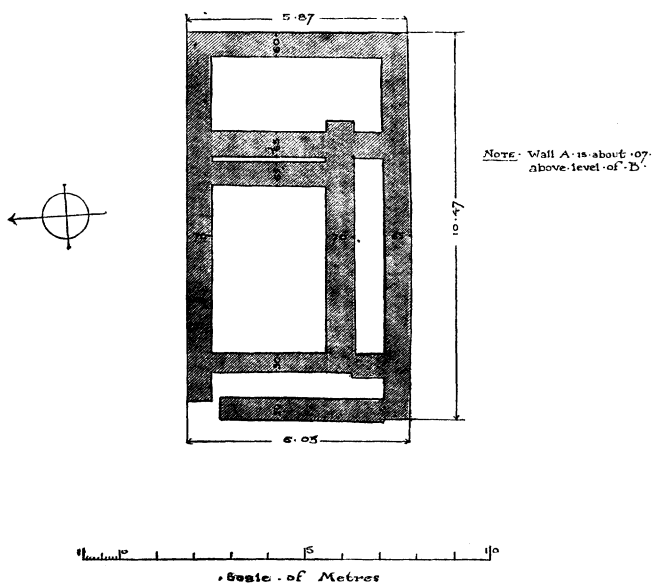






· ANTHEDON ·

· PLAN · OF · FOUNDATIONS · OF · A · TEMPLE ·



· R. W. S. · APRIL · 1889 ·



ANTHEDON. BRONZE IMPLEMENTS FROM THE EXCAVATIONS OF THE AMERICAN SCHOOL.